

WHAT IS CLAIMED IS:

1. An inkjet recording apparatus comprising:
 - a print head having a plurality of inkjet ports;
 - a suction cap which seals up the inkjet ports to
 - 5 carry out ink suction, the suction cap having an ink discharge port for discharging ink received through the ink suction; and
 - an ink guide member which is engageable into the suction cap, the ink guide member having a channel of
 - 10 predetermined length,
 - wherein the channel constitutes a suction channel between the channel and the suction cap when the ink guide member is engaged into the suction cap, the suction channel communicating with the ink discharge port.
- 15 2. The inkjet recording apparatus according to claim 1, wherein the ink guide member has at least one communication hole for allowing the suction channel to communicate with atmosphere.
- 20 3. The inkjet recording apparatus according to claim 2, wherein the communication hole comprises a plurality of communication holes formed at predetermined intervals along a length direction of the channel, and a sectional area of each of the communication holes is set to increase in accordance with a distance from the ink
- 25 discharge port.

4. The inkjet recording apparatus according to claim 2, wherein the communication hole comprises a plurality of communication holes formed at predetermined intervals along a length direction of the channel, and a pitch between adjacent ones of the communication holes is set to decrease in accordance with a distance from the ink discharge port.

5. The inkjet recording apparatus according to claim 2, wherein the ink guide member has a reinforcing rib provided in a width-direction central portion of a top surface thereof so as to extend lengthwise, and the communication hole comprises a plurality of communication holes formed at predetermined intervals along a length direction of the channel on opposite sides of the reinforcing rib.

6. The inkjet recording apparatus according to claim 3, wherein the ink guide member has a reinforcing rib provided in a width-direction central portion of a top surface thereof so as to extend lengthwise, and the communication hole comprises a plurality of communication holes formed at predetermined intervals along a length direction of the channel on opposite sides of the reinforcing rib.

7. The inkjet recording apparatus according to claim 4, wherein the ink guide member has a reinforcing

rib provided in a width-direction central portion of a top surface thereof so as to extend lengthwise, and the communication hole comprises a plurality of communication holes formed at predetermined intervals along a length
5 direction of the channel on opposite sides of the reinforcing rib.

8. The inkjet recording apparatus according to claim 1, further comprising:

a suction pump for generating negative pressure to
10 suck ink from the suction cap; and

a tube connecting the suction pump and the discharge port of the suction cap;

wherein the suction pump sucks ink from the suction cap through the tube.

15 9. A purge unit comprising:

a suction cap for sealing up inkjet ports of a print head, the suction cap having an ink discharge port for discharging ink received from the print head; and

an ink guide member which is engageable into the
20 suction cap, the ink guide member having a channel of predetermined length; and

a suction pump for sucking ink from the suction cap through a tube connected to the ink discharge port,

wherein the channel constitutes a suction channel
25 between the channel and the suction cap when the ink guide

member is engaged into the suction cap, the suction channel communicating with the ink discharge port.

10. An ink guide member which is engageable into a suction cap that has an ink discharge port and seals up
5 inkjet ports of a print head in an inkjet recording apparatus, the ink guide member comprising:

a channel portion of predetermined length,

wherein the channel portion constitutes a suction channel between the ink guide member and the suction cap
10 when the ink guide member is engaged into the suction cap, the suction channel communicating with the ink discharge port.

11. The inkjet recording apparatus according to claim 1, wherein the suction cap has a bottom surface, the
15 ink guide member is engagable into the suction cap so as to opposed to the bottom surface of the suction cap, and a distance between the bottom surface of the suction cap and the ink guide member is set to be larger in an area near the ink discharge port than in an area distant from the
20 ink discharge port when the ink guide member is engaged into the suction cap.

12. The inkjet recording apparatus according to claim 11, wherein the ink guide member has a face portion that faces substantially entire area of the ink discharge
25 port when the ink guide member is engaged into the suction

cap.

13. The inkjet recording apparatus according to claim 11, wherein the ink discharge port is formed in the bottom surface of the suction cap.

5 14. The inkjet recording apparatus according to claim 11, wherein the ink guide member has at least one communication hole for allowing a space defined between the bottom surface of the suction cap and the ink guide member to communicate with atmosphere when the ink guide
10 member is engaged into the suction cap.

15 15. The inkjet recording apparatus according to claim 14, wherein the communication hole comprises a plurality of communication holes, and a sectional area of each of the communication holes is set to increase in
15 accordance with a distance from the ink discharge port.

16. The inkjet recording apparatus according to claim 14, wherein the communication hole comprises a plurality of communication holes, and a sectional area of one of the communication holes the most distant from the
20 ink discharge port is set to be the largest.

17. The inkjet recording apparatus according to claim 12, wherein the ink guide member has at least one communication hole for allowing a space defined between the bottom surface of the suction cap and the ink guide
25 member to communicate with atmosphere when the ink guide

member is engaged into the suction cap, and the communication hole is formed in a position at a predetermined distance from the face portion of the ink guide member.

- 5 18. The inkjet recording apparatus according to claim 14, wherein the communication hole comprises a plurality of communication holes, and a pitch between adjacent ones of the communication holes is set to decrease in accordance with a distance from the ink
10 discharge port.

19. The inkjet recording apparatus according to claim 14, wherein a rib is provided in a width-direction central portion of a top surface of the ink guide member so as to extend in a predetermined direction, and the
15 communication hole comprises a plurality of communication holes formed on opposite sides of the rib.

20. The inkjet recording apparatus according to claim 19, wherein the communication holes are formed in an area where the top surface and the rib intersect each
20 other.

21. The inkjet recording apparatus according to claim 11, wherein an end portion of the ink guide member near the ink discharge port is formed into a shape in which vertical outer walls of the end portion extend along
25 an edge of the ink discharge port.

22. The inkjet recording apparatus according to claim 11, wherein the ink guide member is made of a material whose wettability is higher than that of the cap member.

5 23. The inkjet recording apparatus according to claim 11, wherein the ink guide member has foot portions for defining the distance between the bottom surface of the suction cap and the ink guide member.

24. The inkjet recording apparatus according to claim 23, wherein the foot portions are molded integrally with the ink guide member.

25. The inkjet recording apparatus according to claim 11, wherein the suction cap has a support portion for defining the distance between the bottom surface of the suction cap and the ink guide member..

26. The inkjet recording apparatus according to claim 25, wherein the support portion is molded integrally with the suction cap.

27. The inkjet recording apparatus according to claim 11, wherein the distance between the bottom surface of the suction cap and the ink guide member is set to decrease in accordance with a distance from the ink discharge port.

28. An inkjet recording apparatus comprising:
25 a recording head for jetting ink from ink nozzles to

conduct recording on a recording medium;

a cap having a sealing portion for sealing up the ink
nozzles and an ink discharge port for sucking and
discharging ink received from the recording head by means
5 of negative pressure, the sealing portion having a bottom
surface; and

an ink guide member which is placable in the sealing
portion oppositely to the bottom surface of the sealing
portion,

10 wherein a distance between the bottom surface of the
sealing portion and the ink guide member is set to be
larger in an area near the ink discharge port than in an
area distant from the ink discharge port when the ink
guide member is placed in the cap.

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